# NETernity™ VXS24

## 24 Port Gigabit Ethernet Switch

### Features

- 24 port managed Gigabit Ethernet switch
- 22 ports of 1000 BaseCX to rear panel
- Two ports of optional 1000 BaseT to front panel
- Optional two 10 Gigabit uplink ports for expansion
- Layer 2/3 switching with advanced support for VLANs, QoS and IPv6
- 88 Gbits/second non-blocking switch fabric with full wire speed performance
- Additional 10/100 BaseT out-of-band management port to front panel
- Configuration through web interface
- VITA 41.3 compliant switch
- Air- or conduction-cooled
- RoHS compliant

The NETernity™ VXS24 is a fully managed (Layer 2/3) Gigabit Ethernet switch designed to meet the most demanding requirements for network switching in tactical applications. Available in both air- and conduction-cooled formats, and featuring a non-blocking shared memory architecture, the VXS24 provides an 88 Gbits/second core offering full wire speed performance with minimal latency on all ports simultaneously.

The VXS24 has 22 ports of 1000 BaseCX to the backplane in accordance with VITA 41.3, plus two SFP ports capable of supporting 100 BaseFX, 1000 BaseSX, 1000 BaseLX or 10/100/1000 BaseTX to the front panel. Each of the 1 Gigabit ports may be configured to allow in-band management.

Optionally, a mezzanine capability allows for 10 Gigabit uplink expansion, transitioning from XAUI on the switch packet processor to the appropriate 10G standard at the front panel. The VXS24 can be expanded to a 48-port solution by connecting two VXS24s together via the 10 Gigabit ports.

Out-of-band management of the switch is accessible via 10/100 BaseT Ethernet port and RS232 serial port, both available at the front panel.

The VXS24 has comprehensive network management capabilities based on FASTPATH® software that include VLANs, link aggregation, spanning tree, IPv4, IPv6, IGMP, traffic policing, Quality of Service (QoS), guaranteed bandwidth and SNMP.

Configuration of the switch is via a comprehensive and intuitive web interface, command line interface or SNMP.

# NETernity™ VXS24 -24 Port Gigabit Ethernet Switch

## Specifications

### Ethernet
- 22 ports of 1000 BaseCX baseband to the rear
- Two ports of Gigabit Ethernet to front panel
- Two ports 10 Gigabit via optional mezzanine to front panel

### Compliance
- Compliant with VXS.0
- Complies with the VXS.3 protocol layer standard
- Implements 1000 Mbits/second baseband IEEE 802.3 links
- Section 4.0 of the VXS VMEbus Switched Serial Standard VITA 41.0-200x (VXS.0)
- IEEE 1101.10 compliant EMC front panels as defined in ANSI/VITA 1.1, VME64 extension

### Management features
- Out of band management via 10/100 BaseTX and serial interface
- In-band management via configurable 1G ports
- Management via web interface, CLI or SNMP

### Front panel SFP options
- Two 100FX ports, or
- Two 1000SX ports, or
- Two 1000LX ports, or
- Two 10/100/1000 BaseT ports.

### Front panel XFP options via Mezzanine
- Two 10 Gigabit Ethernet ports

### Front panel
- Serial RS-232 on front panel
- 10/100 BaseTX out-of-band management interface on front panel

### Management Protocols
- Including: IEEE 802.3ac - VLAN tagging; IEEE 802.3ad - link aggregation; IEEE 802.1S /W/D spanning tree; IPv4 and IPv6 traffic policing; access control lists; SNMP V1, V2c and V3; jumbo Ethernet frames
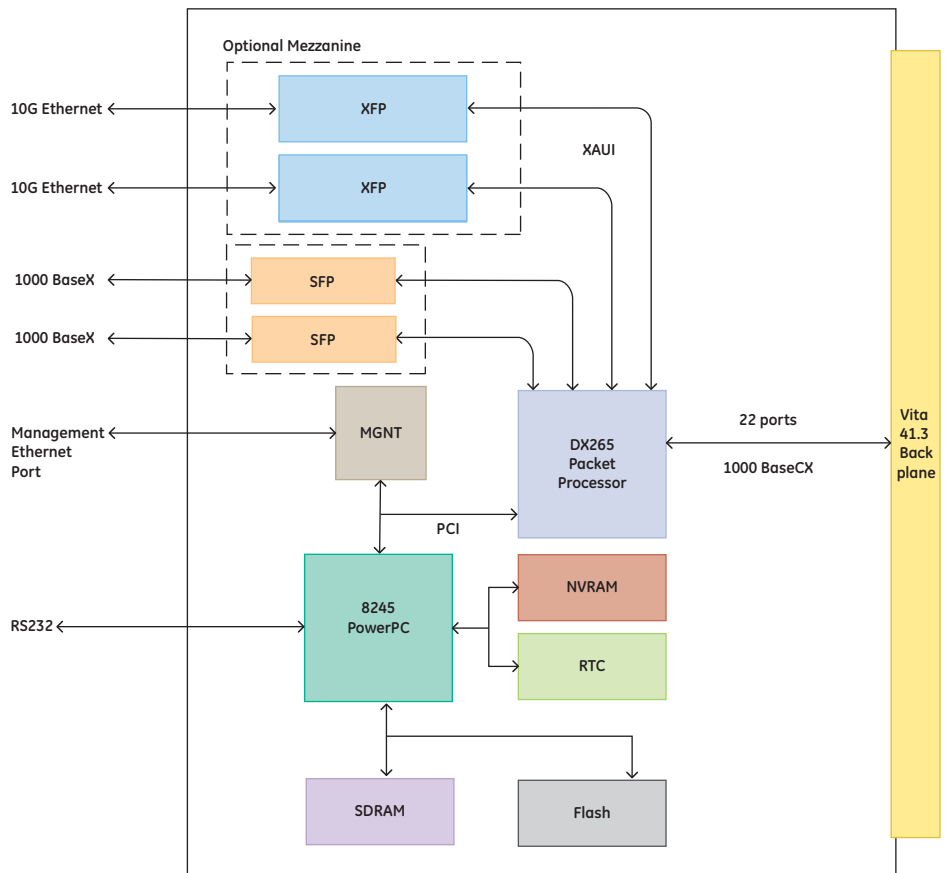
### Environment
- Commercial version:
  - Operating temperature of 0° C to 55° C;
  - Non-operating temperature of -40° C to 85° C;
- Extended temperature version:
  - Operating temperature -40° C to 75° C;
  - Non-operating temperature -50° C to 100° C

### Legislative
- The product is compliant with European Community Directive 2002/95/EC ('RoHS compliant')

## Block Diagram



## About GE Fanuc Intelligent Platforms Embedded Systems

GE Fanuc Intelligent Platforms is a leading global provider of embedded computing solutions for a wide range of industries and applications. Our comprehensive product offering includes many types of I/O, single board computers, high performance signal processors, fully integrated, rugged systems including flat panel displays, plus high speed networking and communications products. The company is headquartered in the U.S. and has design, manufacturing and support offices throughout the world. Whether you're looking for one of our standard products or a fully custom solution, GE Fanuc Intelligent Platforms has the breadth, experience and 24/7 support to deliver what you need. For more information, visit www.gefanuc.com.

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### Additional Resources

For more information, please visit the GE Fanuc Intelligent Platforms web site at:

## www.gefanuc.com